

MG



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/771,140	01/26/2001	Hans-Clemens Steffel	P 6104.1 US	6742

7590 03/14/2002

Gudrun E. Hockett, Patent Agent
P.O. Box 3187
Albuquerque, NM 87190-3187

EXAMINER

GOINS, DAVETTA WOODS

ART UNIT	PAPER NUMBER
----------	--------------

2632

DATE MAILED: 03/14/2002

3

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/771,140

Applicant(s)

STEFFEL, HANS-CLEMENS

Examiner

Davetta W. Goins

Art Unit

2632

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other: ____.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-10 and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by DeLine et al. (US Pat. 6,278,377 B1).

In reference to claim 1, DeLine discloses a monitoring device for vehicles comprising
a) the claimed housing, which is met by mirror housing 16b (col. 5 lines 59-62), b) the claimed at least one mirror glass arranged in the housing so as to have a front side facing an observer, and the at least one mirror glass comprising a reflective layer being reflective in the visible spectral range of light, which is met by the electro-optic or electrochromic reflective element 16d (col. 5 lines 58-67), and c) the claimed at least one camera arranged behind the reflective layer in a viewing direction viewed from the front

Art Unit: 2632

side, which is met by a camera and/or display within the interior of rearview mirror (col. 10 lines 6-30).

In reference to claims 3, 4, DeLine discloses the claimed mirror glass is an electrochromic mirror glass or a conventional mirror glass, which is met by the electro-optic or electrochromic reflective element 16d (col. 5 lines 58-67)

In reference to claim 5, DeLine discloses the claimed auxiliary lighting unit configured to provide additional light for the at least one camera, which is met by an illuminating is provided (preferably, mounted at and illuminating from the mounting site of the camera itself) by one or more near-infrared illumination sources (col. 10 lines 6-30).

In reference to claim 6, DeLine discloses the claimed auxiliary light unit emits light of a wavelength able to pass through the reflective layer, which is met by an illuminating is provided (preferably, mounted at and illuminating from the mounting site of the camera itself) by one or more near-infrared illumination sources. The illumination sources such as light emitting diodes which emit efficiently in the near-infrared portion such that the interior cabin of the vehicle may be illuminated with radiation in a range which the camera is sensitive to (col. 10 lines 6-30).

In reference to claim 7, DeLine discloses the claimed auxiliary lighting unit emits light having a wavelength outside of the visible spectral range of light, which is met by an

Art Unit: 2632

illuminating is provided (preferably, mounted at and illuminating from the mounting site of the camera itself) by one or more near-infrared illumination sources. The illumination sources such as light emitting diodes which emit efficiently in the near-infrared portion, both which do not emit efficiently in the visible portion (wavelengths below approximately 0.75 microns) (col. 10 lines 6-30).

In reference to claims 8, 9, DeLine discloses the claimed lighting unit comprises light-emitting diodes, which is met by the illumination sources such as light emitting diodes which emit efficiently in the near-infrared portion (col. 10 line 6-30).

In reference to claim 10, DeLine discloses the claimed auxiliary lighting unit is arranged behind the reflective layer in the viewing direction, which is met by illumination provided (preferably, mounted at and illuminating from the mounting site of the camera itself) (col. 10 lines 6-30).

In reference to claim 12, DeLine discloses the claimed housing and the mirror glass form an interior rearview mirror, wherein the housing has a rim, and wherein the auxiliary lighting unit comprises light-emitting diodes arranged on the rim of the housing, which is met by mirror assembly 16 including an elector-optic or electrochromic reflective element 16d. The mirror assembly 16 an indicator 72, such as a light emitting diode, mounted at, in or on or adjacent the bezel 16e (col. 5 lines 58-65, col. 7 lines 15-19, and col. 8 lines 55-60).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over DeLine et al. in view of DeVries, Jr. et al. (US Pat. 6,158,655)

In reference to claim 2, although DeLine does not specifically disclose the claimed reflective layer is selected from the group consisting of an interference reflective layer, a chromium reflective layer, a titanium reflective layer, and a titanium-chromium reflective layer, he does disclose an electro-optic or electrochromic reflective element 16d (col. 5 lines 58-67). DeVries discloses a rearview mirror assembly 10 including a housing 14 and reflective element 16 which may comprise a metallic reflector coated glass substrate, such as with a thin chromium or chromium alloy reflector coating (col. 4 lines 46-54). Since both DeLine and DeVries disclose rearview mirror assemblies comprising a reflector, it would have been obvious to one of ordinary skill in the art to incorporate the use of a chromium reflective layer, as disclosed by DeVries, with the system of DeLine, as an alternative method of design to produce a mirror-type reflection.

Art Unit: 2632

5. Claims 11, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeLine et al. in view of Roberts (US Pat. 5,355,284).

In reference to claim 11, although DeLine does not specifically disclose the claimed auxiliary lighting unit comprising light-emitting diodes arranged in a matrix of rows and columns, he does disclose an illuminating is provided (preferably, mounted at and illuminating from the mounting site of the camera itself) by one or more near-infrared illumination sources. The illumination sources such as light emitting diodes which emit efficiently in the near-infrared portion such that the interior cabin of the vehicle may be illuminated with radiation in a range which the camera is sensitive to (col. 10 lines 6-30). Roberts discloses a mirror assembly 10 including an array or bank of LEDs 71 mounted in an array (col. 10 lines 16-29 and Fig. 5). Since DeLine discloses a mirror device including light emitting diodes placed within the housing, it would have been obvious to one of ordinary skill in the art to incorporate the design of placing DeLine's light emitting diodes in a matrix of rows, as disclosed by Roberts, to provide an evenly distributed amount of light throughout the housing for the camera to enhance illumination to pick up images outside of the mirror housing.

In reference to claims 17, 18, although DeLine does not disclose the claimed at least one camera comprising a low light level intensifier, he does disclose an illuminating is provided (preferably, mounted at and illuminating from the mounting site of the camera itself) by one or more near-infrared illumination sources. The illumination sources such

as light emitting diodes which emit efficiently in the near-infrared portion such that the interior cabin of the vehicle may be illuminated with radiation in a range which the camera is sensitive to (col. 10 lines 6-30). Roberts discloses a control circuit would intensify the light output when the electrochromic mirror was dimmed (col. 17 lines 16-32). Since DeLine discloses a mirror with light emitting diodes within the housing used to provide near-infrared illumination for the camera mounted within the housing, it would have been obvious to one of ordinary skill in the art to incorporate a light level intensifier, such as the means for adjusting the light as disclosed by Roberts, with the system of DeLine, to ensure that the right amount of light will be illuminated for the camera to operate based on the level of light within the cab of the vehicle.

6. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over DeLine et al.

In reference to claim 13, although DeLine does not disclose the claimed rim is comprised of a material that is opaque to the human eye, he does disclose a mirror assembly 16 including a bezel 16e (col. 5 lines 58-65). Since DeLine's system is concerned with light from within the housing not being transmitted from outside of the housing, it would have been obvious to one of ordinary skill in the art to provide a rim (bezel) that is opaque to ensure that the light for the camera stays within the housing.

7. Claims 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeLine et al. in view of Bagué (US Pat. 6,246,933 B1).

In reference to claim 14-16, although DeLine does not disclose the claimed image-transmitting fiber bundle connected to the at least one camera, he does disclose an interior rearview mirror including a camera and/or display for providing an image of an area not viewable by the rearview mirror when it is adjusted for driving conditions (col. 10 lines 6-11). Bagué discloses rear view mirror 14 comprising a video/audio camera 13. The signals from the video are modulated for transmission via an optical fiber cable to an advanced video box 10 under the driver's seat 11 (col. 15 lines 49-55). Since DeLine discloses a camera within a rearview mirror to capture images and display them to the driver, it would have been obvious to one of ordinary skill in the art to incorporate a transmitting fiber bundle, such as the fiber cable of Bagué's, with the system of DeLine, to provide a discrete means for easily transmitting captured images from the camera to a remote location.

8. The prior art of record and not relied upon is considered pertinent to applicant's disclosure as follows. Schmidt (US Pat. 5,570,127), Steed et al. (US Pat. 6,151,065), and Van Sant et al. (US Pat. 6,320,610 B1), which deal with cameras mounted within vehicle mirrors.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Davetta W. Goins whose telephone number is 703-306-2761. The examiner can normally be reached on 4-5-9.

Art Unit: 2632

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffery A. Hofsass can be reached on 703-305-4717. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3988 for regular communications and 703-305-3988 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-7666.

D. W. G.

Davetta W. Goins
Art Unit 2632

D.W.G.
March 8, 2002